

*The Seventy-Second Annual Meeting of the*  
**Canadian Medical Association**  
 to be held in Winnipeg June 23, 24, 25, 25, 27, 1941

**Convention Headquarters: Royal Alexandra Hotel**

*President . . . . . Dr. Duncan Graham, Toronto.*

*President-Elect . . . Dr. Gordon S. Fahrni, Winnipeg.*

*General Secretary . . Dr. T. C. Routley.*

**Wednesday, June 25th**

**9.00 a.m.—Round Table Conferences.**

**Medicine**

Migraine—

Dr. H. D. Kitchen, Winnipeg, Chairman.  
 Dr. A. R. MacLean, Rochester, Minn.  
 Dr. Donald McEachern, Montreal.

**Obstetrics**

Management of ante and post partum haemorrhage—

Dr. Ross Mitchell, Chairman.  
 Dr. A. B. Nash, Vancouver.  
 Dr. J. A. Brown, Regina.  
 Dr. John Mann, Toronto.  
 Dr. B. D. Best, Winnipeg.

**Ophthalmology**

Orthoptic treatment of strabismus—

Dr. F. A. Macneil, Winnipeg, Chairman.  
 Dr. C. M. Clare, Winnipeg.  
 Dr. I. H. Beckman, Winnipeg.  
 Dr. J. McGillivray, Winnipeg.

**Surgery**

Fractures—

Dr. A. Gibson, Winnipeg, Chairman.  
 Dr. R. I. Harris, Toronto.  
 Dr. George Ramsay, London.  
 Dr. J. R. Naden, Vancouver.

**Urology**

Bladder tumours—

Dr. H. D. Morse, Winnipeg, Chairman.  
 Dr. Emerson Smith, Montreal.  
 Dr. James McClelland, Toronto.  
 Dr. Frederick Pilcher, Calgary.

**10.15 a.m.—General Sessions.**

Dr. Charles Hunter, Winnipeg.  
 Dizziness from the internist's standpoint.  
 Dr. William F. Braasch, Rochester, Minn.  
 The surgical kidney as a factor with hypertension.  
 Valedictory Address by the President.  
 Dr. Duncan Graham, Toronto.  
 The Osler Lecture.

**12.30 p.m.—Luncheon.**

Royal Alexandra Hotel.

Speakers: His Worship Mayor John Queen, Winnipeg.

Dr. Sidney E. Smith, President of the University of Manitoba.

**2.15 p.m.—Sectional Meetings.**

**Section of Anaesthesia**

Dr. D. H. Huggins, Winnipeg.

Avertin in neuro-surgery.

Dr. D. G. Revell, Jr., Winnipeg.

Ether, the all-purpose anaesthetic.

Dr. H. V. Rice, Winnipeg.

Newer concepts of anaesthetic physiology.

Dr. C. H. Robson, Toronto.

Anaesthesia for children (illustrated by coloured film).

Dr. R. M. Tovell, and

Dr. A. W. Friend, Hartford, Conn.

The control of physical hazards of anaesthesia.

**Section of Historical Medicine**

Dr. W. A. Gardner, Winnipeg.

A voice from St. Helena.

Dr. J. A. Gunn, Winnipeg.

Ambrose Pare as a military surgeon.

Dr. D. S. Macnab, Calgary.

Dr. Hugh Owen Thomas.

Dr. D. G. Revell, Sr., Edmonton.

The first twenty-five years of anatomy teaching in Alberta.

**Section of Medicine**

Dr. Eldon M. Boyd, Kingston.

Expectoration, expectorants, and cough medicines.

Dr. E. S. Mills, and

Dr. E. S. Murray, Montreal.

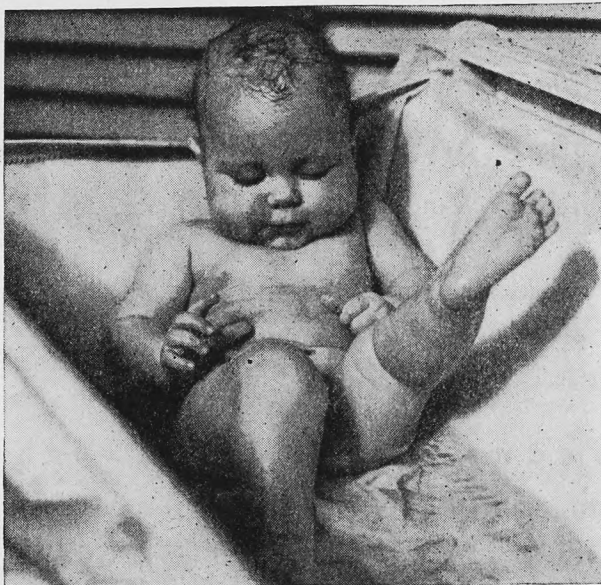
The relative value of the various sulfonamide drugs in the treatment of acute respiratory infections including pneumonia.

Dr. R. J. Collins, East Saint John.

Problems arising in rehabilitation schemes for the tuberculous.

Dr. D. S. McEwen, Winnipeg.

Upper respiratory infection in general practice.



## AN EFFECTIVE ANTIRACHITIC

"Only one premature infant developed rickets when the sole source of vitamin D was from the irradiated evaporated milk. None of the weakling and normal full term infants developed rickets. Cod liver oil concentrate evaporated milks and cod liver oil, whose Vitamin D dosages ranged from 200 to 500 U.S.P. units daily, appeared to be less effective than the irradiated evaporated milk in the production of good linear growth."—May, E. W., and Wygant, T. M.: Rachitic Studies, III. An Evaluation of Methods of Antirachitic Treatment. Arch. Pediat., 56:426-442, July, 1939.

**T**HE VALUE of irradiated evaporated milk as a prophylactic source of vitamin D is indicated by the comprehensive study quoted above. Physicians are invited to write for reprints of this article; also for book,

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## Wednesday, June 25th

### 2.15 p.m.—Sectional Meetings (cont.).

- Dr. William Boyd, Toronto.  
Changing views regarding pyelonephritis.
- Dr. J. H. Geddes, London.  
What is Colitis?

#### Section of Obstetrics and Gynaecology

- Dr. W. S. Holmes, Saskatoon.  
Induction of labour—indications, methods and dangers.
- Dr. Leon Gerin-Lajoie, Montreal.  
Contribution to the surgery of the pre-sacral nerve in gynaecological ailments.
- Dr. P. J. Kearns, Montreal.  
Anatomical changes in the lower uterine segment in pregnancy and labour.
- Dr. F. G. McGuinness, Winnipeg.  
The obstetrical significance of intra-cranial injury of the newborn, based on three hundred autopsies.

#### Section of Paediatrics

- Dr. K. B. Leslie, Winnipeg.  
Medication before and after anaesthesia in children.
- Dr. F. F. Tisdall, Toronto.  
War and post-war problems regarding childhood nutrition.
- Dr. A. R. Birt, Winnipeg.  
Troublesome skin diseases in infancy and childhood.
- Dr. Alfred Deacon, Winnipeg.  
Rehabilitation of poliomyelitis cases.

- Dr. U. J. Gareau, Regina.  
Acrodynia, abstracts of seventy-five cases.

#### Section of Surgery

- Dr. A. C. Abbott, Winnipeg.  
Inguinal hernia with special reference to recurrence.
- Dr. Walter G. Carscadden, Toronto.  
Injuries of the hand.
- Dr. W. F. Gillespie, Edmonton.  
The treatment of perianal abscess and fistula.
- Dr. R. K. Magee, Peterborough.  
Subphrenic abscess.
- Dr. Herbert Meltzer, Ninette.  
One hundred and eighty-one cases of thoracoplasty.

#### Section of Urology

- Dr. E. D. Busby, London.  
Present status of chemotherapy in urinary infections.
- Dr. W. F. Braasch, Rochester, Minn.  
Prognosis in non-surgical bilateral renal tuberculosis.
- Dr. J. C. McClelland, Toronto.  
Anuria.
- Dr. Frank S. Patch, and  
Dr. J. T. Codnere, Montreal.  
Treatment of hydronephrosis secondary to aberrant renal vessels.
- Dr. Frederick Pilcher, Calgary.  
Transurethral prostatic resection.

## Thursday, June 26th

### 9.00 a.m.—Round Table Conferences.

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#### Medicine

- Normal Blood Pressure Variations—  
Dr. L. G. Bell, Winnipeg, Chairman.  
Dr. J. D. Adamson, Winnipeg.  
Dr. A. R. MacLean, Rochester, Minn.  
Wing Commander F. A. L. Mathewson, Regina.

#### Gynaecology

- Carcinoma of the uterus—  
Dr. J. D. McQueen, Winnipeg, Chairman.  
Dr. A. W. Blair, Regina.  
Dr. P. J. Kearns, Montreal.  
Dr. W. G. Cosbie, Toronto.

#### Ophthalmology

- Corneal Lesions—  
Dr. J. T. Cruise, Winnipeg, Chairman.  
Dr. E. H. Alexander, Winnipeg.

#### Paediatrics

- Chronic cough in childhood—  
Dr. O. J. Day, Winnipeg, Chairman.  
Dr. R. R. Struthers, Montreal.  
Dr. Alan Brown, Toronto.  
Dr. Gregor McGregor, Toronto.

#### Surgery

- Acute appendicitis—  
Dr. P. H. T. Thorlakson, Winnipeg, Chairman.  
Dr. Roscoe R. Graham, Toronto.  
Dr. L. H. McKim, Montreal.  
Dr. D. E. Robertson, Toronto.

#### Urology

- The management of ureteral calculi—  
Dr. C. B. Stewart, Winnipeg, Chairman.  
Dr. D. W. MacKenzie, Montreal.  
Dr. Earl Hall, Vancouver.  
Dr. R. McComb, Toronto.

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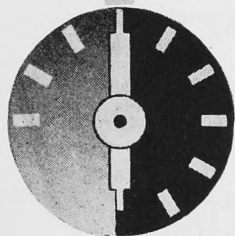
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# MILK OF TRINESIUM



## Thursday, June 26th

### 10.15 a.m.—General Sessions.

- Dr. F. W. Jackson, Winnipeg.  
Some observations on maternal care.
- Dr. Ralph M. Tovell, and  
Dr. Curtiss B. Hickcox, Hartford, Conn.  
The present status of cyclopropane.
- Dr. G. E. Richards, Toronto.  
Ten years' progress in the radiotherapy of oral cancer; present methods and present results.
- Dr. Gavin Miller, Montreal.  
Recent advances in the surgical approach to carcinoma of the large bowel and rectum.

### 12.30 p.m.—Luncheon.

- Royal Alexandra Hotel.  
Speaker: Dr. E. L. Ross, Ninette, Man.

### 2.15 p.m.—Sectional Meeting.

#### Section of Anaesthesia

- Symposium on Spinal Anaesthesia.  
Dr. Byron R. Burwash, Saskatoon.  
Analeptics.
- Dr. I. H. Davidson, Winnipeg.  
Pre-medication.
- Dr. K. E. Hollis, Toronto.  
Indications and contraindications.
- Dr. H. J. Shields, Toronto.  
Physiology.
- Dr. G. D. Stanley, Calgary.  
Sequelae in intraspinal anaesthesia.
- Dr. Norman S. Clark, Toronto.  
Agents.

#### Section of Historical Medicine

- Dr. William Boyd, Toronto.  
The evolution of medical science.
- Dr. J. H. Elliott, Toronto.  
Osler's class at the Toronto School of Medicine.
- Dr. J. C. Hossack, Winnipeg.  
History of the plague.
- Dr. A. G. Nicholls, Montreal.  
Herba panacea.
- Dr. N. R. Rawson, Winnipeg.  
William Farr, founder of vital statistics.

#### Section of Medicine

- Dr. F. T. Cadham, Winnipeg.  
Vaccine therapy in arthritis.

#### Section of Medicine (Continued)

- Dr. A. A. Fletcher, and  
Dr. Wallace Graham, Toronto.  
Gold therapy in chronic arthritis.
- Dr. A. T. Cameron, Winnipeg.  
Blood plasma proteins; their clinical significance.
- Dr. John W. Scott, Edmonton.  
The natural history of migraine.
- Dr. S. E. C. Turvey, Vancouver.  
Asymptomatic neurosyphilis.
- Dr. T. A. Pincock, Brandon.  
Transitions in psychiatry.

#### Section of Ophthalmology

- Dr. D. M. Genoff, Winnipeg.  
Senile cataract.
- Dr. H. O. McDiarmid, Brandon.  
Intraocular tumours.
- Dr. F. D. McKenty, Winnipeg.  
The results of tarsectomy and a simplification of the technique.
- Dr. Fred. T. Tooke, and  
Dr. John V. Nicholls, Montreal.  
The incidence and character of haemorrhages occurring in the retina in diabetes.

#### Section of Paediatrics

- Dr. R. R. Struthers, and  
Dr. H. L. Bacal, Montreal.  
The significance of rheumatic nodules in childhood.
- Dr. Alton Goldbloom, and  
Dr. N. W. McLellan, Montreal.  
Staphylococcal septicaemia — prognosis and treatment.
- Dr. Donald Fraser, Toronto.  
Prophylactic immunization in children.
- Dr. Alan Brown, Toronto.  
Diarrhoea.

#### Section of Radiology

- Symposium on Carcinoma of the Cervix.  
Anatomy.  
Professor I. Maclaren Thompson, Winnipeg.
- Pathology.  
Dr. D. Nicholson, Winnipeg.
- Radium.  
Dr. Ethlyn Trapp, Vancouver.
- X-Radiation.  
Dr. A. W. Blair, Regina.
- Metastasis and management.  
Dr. B. R. Mooney, Winnipeg.
- Complications following radiation treatment in carcinoma of the cervix.  
Dr. W. G. Cosbie, Toronto.

## Thursday, June 26th

### 2.15 p.m.—Sectional Meetings (cont.).

#### Section of Surgery

- Dr. M. R. MacCharles, Winnipeg.  
Causes of poor results in biliary tract surgery.
- Dr. J. S. McEachern, Calgary.  
Some surgical problems arising from developmental errors.
- Dr. H. F. Mosley, Montreal.  
Shoulder pain.
- Dr. O. W. Niemeier, Hamilton.  
Obstructive jaundice.
- Dr. Charles W. Harris, Toronto.  
Injuries about the ankle joint.
- Dr. Lorne H. McConnell, Saskatoon.  
Epilepsy—analysis of the results of ninety-one craniotomies.

#### Section of Urology

- Dr. Robin Pearse, Toronto.  
Fibroliposacromata of the kidney.
- Dr. Earl Hall, Vancouver.  
Carcinoma of the penis.
- Dr. W. A. Dakin, Regina.  
Cutaneous ureterostomy.
- Dr. Emerson Smith, Montreal.  
Experiences with interstitial cystitis.
- Dr. C. B. Stewart, Winnipeg.  
Persistent Wolffian duct—report of cases.
- Dr. G. N. Tucker, Edmonton.  
Recumbency urolithiasis.

## Friday, June 27th

### 9.00 a.m.—Round Table Conferences.

#### Medicine

- Prevention of Common Cold—  
Dr. Wm. Wood, Winnipeg, Chairman.  
Dr. Donald Fraser, Toronto.  
Dr. U. J. Gareau, Regina.

#### Otolaryngology

- Upper respiratory infections—  
Dr. Robert Black, Winnipeg, Chairman.  
Dr. F. D. McKenty, Winnipeg.  
Dr. A. Leishman, Winnipeg.

#### Paediatrics

- Genito-urinary infections in childhood—  
Dr. Bruce Chown, Winnipeg, Chairman.  
Dr. H. S. Little, London, Ont.  
Dr. Frank S. Patch, Montreal.  
Dr. C. B. Stewart, Winnipeg.

#### Surgery

- Tumour Clinic—  
Dr. Daniel Nicholson, Winnipeg, Chairman.  
Dr. George T. Pack, New York.  
Dr. M. R. MacCharles, Winnipeg.

### 10.15 a.m.—General Sessions.

- Dr. A. F. Menzies, Morden.  
Post-war medical problems.
- Dr. Rustin McIntosh, New York.  
Jaundice.
- Dr. Wallace Wilson, Vancouver.  
Whither Medicine!
- Dr. K. G. McKenzie, and  
Dr. E. H. Botterell, Toronto.

The common neurological syndromes produced by pressure from extrusion of an intervertebral disc.

(Illustrated by coloured film)

### 12.30 p.m.—Luncheon.

- Royal Alexandra Hotel.  
Speaker: Brigadier R. M. Gorssline, D.G.M.S., Ottawa.

### 2.15 p.m.—Sectional Meetings.

#### Section of Medicine

- Dr. G. F. Amyot, Victoria.  
Public health and the private practice of medicine.
- Dr. Trevor Owen, Toronto.  
Fatigue, rest and exercise.
- Dr. F. C. Heal, Moose Jaw.  
The management of common disorders of cardiac rhythm.
- Dr. Harris McPhedran, Toronto.  
Cardiovascular disease associated with toxic goitre.
- Dr. J. M. McEachern, Winnipeg.  
Coronary disease in Manitoba.

#### Section of Obstetrics and Gynaecology

- Dr. C. R. Rice, Winnipeg.  
Disturbances of menstrual function in tuberculous patients.
- Dr. N. W. Philpott, Montreal.  
Anaesthesia and analgesia in obstetrics with particular reference to the use of local anaesthesia.
- Dr. John Mann, Toronto.  
Toxaemia of pregnancy; present day classification; etiology and treatment.
- Dr. A. B. Nash, Victoria.  
Treatment of acute and chronic salpingitis.

## Friday, June 27th

## 2.15 p.m.—Sectional Meetings.

## Section of Military Medicine

Symposium—Medical aspects of casualties returning from overseas.

## Introduction.

Lieut.-Colonel A. M. Davidson, President, Standing Medical Board, No. 10 Detachment, R.C.A.M.C., M.D. 10.

## Medical Cases.

Major B. H. Olson, No. 10 Detachment, R.C.A.M.C.

Dr. J. D. Adamson, Medical Staff, D.P. & N.H., Winnipeg.

## Surgical Cases.

Lieut.-Colonel T. E. Holland, R.C.A.M.C., Officer Commanding, Fort Osborne Military Hospital, M.D. 10.

Dr. J. A. Gunn, Surgeon, D.P. & N.H., Winnipeg.

## Problems of Army Hygiene.

Major M. R. Elliott, District Hygiene Officer, No. 10 Detachment, R.C.A.M.C.

## Special problems of the R.C.A.F. Medical Officer.

Wing-Commander G. E. Hall, Ottawa.

## Section of Otolaryngology

Dr. G. W. Fletcher, Winnipeg.

Tumours of the larynx—diagnosis and treatment.

Dr. Keith Hutchison, Montreal.

Acute otitic meningitis; chemotherapy advances.

Dr. Gregor McGregor, Toronto.

Bronchoscopy—a safeguard against diagnostic errors.

Dr. George Tremble, Montreal.

Irrigation of the sphenoid sinuses—a safe and simple method.

(Illustrated by coloured film).

Dr. E. J. Washington, Winnipeg.

Lateral sinus thrombosis.

Clinical presentation of cases at the General Hospital and St. Boniface Hospital.

## Section of Paediatrics

Dr. H. S. Little, London.

Chemotherapy of meningococcal meningitis.

Dr. Rustin McIntosh, New York.

Nephritis.

Dr. L. M. Lindsay, and

Dr. F. W. Wigglesworth, Montreal.

Report of two cases of purpura fulminans.

Dr. Graham Ross, Montreal.

The use of vitamin K in paediatric practice with special reference to the newborn period.

## Section of Radiology

Dr. L. J. Carter, Brandon.

Radiological examination of the terminal ileum and proximal colons—a twenty-five year resumé.

Dr. A. D. Irvine, Edmonton.

Coarctation of the aorta, radiologically considered.

Dr. Hervé Lacharité, Montreal.

Osteochondritis desiccans.

Dr. W. H. McGuffin, Calgary.

Radiological evidence as a diagnostic aid in diseases of the heart.

Dr. Carleton B. Peirce, and

Dr. L. McRae, Montreal.

Bronchography in pulmonary disease of undetermined cause.

## Section of Surgery

Dr. C. W. Burns, Winnipeg.

Surgical management of traumatic abdomen.

Dr. Robert C. Laird, Toronto.

The diagnosis and treatment of bronchiectasis.

Dr. George Ramsay, London.

Anterior poliomyelitis; observations on recovery rate of paralyzed muscles.

Dr. Fulton Risdon, Toronto.

The present status of the treatment of hare lip and cleft palate deformities.

Dr. Dudley E. Ross, and

Dr. J. H. Palmer, Montreal.

The surgical treatment of patent ductus arteriosus.

## Canadian Medical Association Golf Tournament

Niakwa Country Club, June 24th

## PRIZES—

Canadian Medical Association Trophy, plus Miniature, for all members of the Canadian Medical Association.

Manitoba Medical Association Trophy, plus Miniature, for all members of the Manitoba Medical Association.

There is a wealth of valuable prizes donated for this tournament.

## TRANSPORTATION—

Special Taxi rates provided to and from all Golf Courses. Enquire at the Registration Desk.

## SPECIAL PRIVILEGES ON FIVE COURSES

Members of the C.M.A. will be privileged to play on the following Golf Courses on dates and for green fees as stated herewith:—

**NIAKWA**—June 24 to 27, inclusive. C.M.A. badge and \$1.00 green fees.

**PINE RIDGE**—June 24 to 27, inclusive. C.M.A. badge and \$1.00 green fees.

**ELMHURST**—June 25 to 27, inclusive. C.M.A. badge and \$1.00 green fees.

**ST. CHARLES**—June 24 to 27, inclusive. Guest Card and \$1.50 green fees.

**SOUTHWOOD**—June 24 to 27, inclusive. C.M.A. badge and 75c green fees in the morning, \$1.00 green fees in the afternoons.

## Luncheon Speakers

### Wednesday, June 25th

- 12.30 p.m.—Royal Alexandra Hotel.  
His Worship Mayor John Queen.  
Dr. Sidney Smith, President of the  
University of Manitoba.

### Thursday, June 26th

- 12.30 p.m.—Royal Alexandra Hotel.  
Dr. E. L. Ross, President of the Man-  
itoba Medical Association.

### Friday, June 27th

- 12.30 p.m.—Royal Alexandra Hotel.  
Brigadier R. M. Gorssline, Director  
General Medical Services, Ottawa.

## Entertainment

### Tuesday, June 24th

- 7.00 p.m.—Royal Alexandra Hotel.  
Dinner to General Council.

### Wednesday, June 25th

- 4.30 p.m.—Reception at the St. Charles Country  
Club given by Dr. Gordon Fahrni,  
President-Elect of the Canadian  
Medical Association, and Mrs. Fahrni.  
8.30 p.m.—Annual General Meeting and Instal-  
lation of the President.  
10.30 p.m.—Reception and Dance.

### Thursday, June 26th

- 4.30 p.m.—Reception at Government House by  
His Honor the Lieutenant-Governor  
and Mrs. R. F. McWilliams.  
7.00 p.m.—Dinner.

## THE TRUE ECONOMY OF DEXTRI-MALTOSE

It is interesting to note that a fair average of the length of time an infant receives Dextri-Maltose is five months: That these five months are the most critical of the baby's life: That the difference in cost to the mother between Dextri-Maltose and common sugars is about \$7 for this entire period—a few cents a day: That, in the end, it costs the mother less to employ regular medical attendance for her baby than to attempt to do her own feeding, which in numerous cases leads to a seriously sick baby eventually requiring the most costly medical attendance.—Adv.

## Ladies' Program

Visiting Ladies are requested to register immediately upon arrival. They will be supplied with badges and will be given programs containing full information regarding social functions.

### Monday, June 23rd

- 4.00 p.m.—Tea at the University Women's Club for the Wives of the Members of the Canadian Medical Association General Council.

### Tuesday, June 24th

- 1.00 p.m.—Luncheon at the St. Charles Country Club for the Wives of Members of the General Council and the Wives of the Executives of Saskatchewan and Manitoba Divisions.  
Hostess — Mrs. Gordon S. Fahrni.  
7.00 p.m.—Supper (Informal) at the Manitoba Club for the Wives of Members of the General Council and the Wives of the Executives of Saskatchewan and Manitoba Divisions.  
Hostess — Mrs. Edward L. Ross.

### Wednesday, June 25th

- 4.30 p.m. Reception at the St. Charles Country until Club for Members of the Association  
6.00 p.m.—and their Wives by the President-Elect of the Canadian Medical Association and Mrs. Gordon S. Fahrni.  
8.30 p.m.—Ceremonial and Installation of the President of the Canadian Medical Association at the Royal Alexandra Hotel.  
10.30 p.m.—Association Reception and Dance at the Royal Alexandra Hotel. Families of Members are welcome. Tickets \$1.00 per person.

### Thursday, June 26th

- 4.30 p.m. Reception at Government House by until His Honor the Lieutenant-Governor  
6.00 p.m.—and Mrs. R. F. McWilliams for Members of the Canadian Medical Association and their Wives.  
7.30 p.m.—Ladies' Dinner (Formal) at the Fort Garry Hotel. Tickets \$1.25. Transportation for the visiting ladies may be arranged at the Registration Desk.

### Friday, June 27th

- 10.00 a.m.—Breakfast Party at the Motor Country Club, Lower Fort Garry. Tickets, 75c. Transportation for the visiting ladies may be arranged at the Registration Desk.



## Clinical Section

### FRACTURES OF THE SPINE\*

A. E. DEACON, M.D., M.Sc.O.

*Assistant Orthopaedic Surgeon, Winnipeg General Hospital  
Orthopaedic Surgeon, The Children's Hospital, and Grace Hospital*

The fractures of the spine of which I am speaking are the more common compression fractures of the anterior half or two thirds of the bodies of the thoracic and lumbar vertebrae, without fracture of the pedicles or laminae, and without spinal cord damage.

These occur in falls on the feet or buttocks with the spine flexed. The lower part of the spine stops, while the force on the upper spine continues, and the anterior portions of one or more bodies fracture and become compressed.

A vertebral body is composed of cancellous bone surrounded by a thin layer of compact bone. A sudden force applied to the anterior portion of a vertebral body causes a comminution of the cortical bone, and a compression of the cancellous bone. The anterior longitudinal ligament, attached to the front of the body is not torn but becomes folded in the region of the fracture.

Any vertebra may undergo a compression fracture but the majority occur in the four vertebrae adjacent to the dorsolumbar articulation: the eleventh and twelfth dorsal, and the first and second lumbar. The importance of knowing this lies in the fact that sometimes the signs and symptoms are referred downwards. X-rays of the lumbosacral spine which fail to include the lower dorsal and upper lumbar vertebrae may lead to a false diagnosis of sprain or contusion, instead of fracture.

The diagnosis is made on the nature of the injury, pain in the back, a kyphosis which may be seen or felt, irregularity in the spaces between the spinous processes, tenderness over one or more spinous processes, and by X-ray. Anteroposterior X-rays alone, even stereoscopic A.P. X-rays, are often insufficient to demonstrate a compression fracture. Lateral views should always be taken in addition, as these show the anterior borders of the vertebrae, and any compression can be easily detected.

Unreduced compression fractures lead to chronic backache, and sometimes to further compression. Therefore, these fractures should be reduced within a few days of their occurrence, and the reduction maintained until bony union is complete.

The method of reduction used here is that described by Watson-Jones. The patient is given an injection of morphine and taken to the operating room. He is suspended in the prone position between two tables. The thighs rest on one table and the arms and chin on another. The body is unsupported in the thoracic and abdominal regions. The patient is allowed to sag down in the middle, and this sagging hyper-extends the spine. The hyper-extension of the spine straightens out the anterior longitudinal ligament, and the straightening out of the anterior longitudinal ligament pulls the fragments back into anatomical position, because the upper and lower borders of the vertebral body is firmly attached to the anterior longitudinal ligament. Overcorrection is prevented by the strong ligaments in front of the vertebral column, by the crura of the diaphragm, and by the psoas muscles. As reduction occurs the kyphosis disappears and is replaced by the normal lordosis, and the intervals between the spinous processes become uniform.

Dr. A. Gibson has devised a refinement in the technic of reduction which aids both the patient and the operator. In Dr. Gibson's system the table upon which the patient's thighs rest is one of which the foot can be lowered gradually. As the foot of the table is lowered the patient's thighs are lowered, and the spine is hyper-extended. With this technic the exact degree of hyper-extension desired can be obtained, the patient is relaxed and more comfortable, and the operator has complete control over the patient during the reduction.

When complete reduction has been obtained a plaster body jacket is applied before the patient is moved. The jacket reaches from the top of the sternum to the symphysis pubis in front, and from the fourth or fifth dorsal spine to the middle of the sacrum behind. When the plaster has set the patient is allowed to walk about freely. The jacket keeps the spine in hyper-extension. In this position the superincumbent weight is not transmitted through the bodies but through the lateral articulations. The anterior longitudinal ligament is kept fully stretched and this maintains reduction until healing occurs.

The plaster is kept on for three or four months. Then if healing does not seem to be complete, the patient is fitted with a back brace or surgical corset. This maintains hyper-extension when he is up, but may be removed when the patient is recumbent since, in the recumbent position, the spine is free from weight bearing.

\*From an address delivered to the Winnipeg Medical Society, January 17th, 1941.

# Crystalline B-Complex Factors

Convenient dosage forms for treatment  
of specific deficiencies of these factors



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**PYRIDOXINE HYDROCHLORIDE SQUIBB**—Pyridoxine Hydrochloride Squibb is supplied in Microcaps for oral administration and in Solution for parenteral use.

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## Editorials and Association Notes

### The Manitoba Medical Review

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*Editorial or other opinion expressed in this Review is not necessarily  
sanctioned by the Manitoba Medical Association*

### Rule of Thumb for Sulfanilamide Compounds

**Pneumonia:** After sputum specimen obtained (if necessary by a smear from droplets coughed on to a laryngeal mirror held in the throat) give Sulfathiazol 3 gms. followed by 1 gm. O.H. IV. till temperature has been normal for 72 hours. Then reduce dose.

**Meningitis:** Sulfapyridine 3 gms. followed by 1 gm. O.H. IV. till temperature has been normal for 72 hours. Then reduce dose.

**Gonorrhoea:** Sulfathazol 1 gm. t.i.d. p.c. for 5 days.

**Streptococcal Infections:** Sulfanilamide 3 gms. followed by 1 gm. O.H. IV. In streptococcal otitis media or mastoiditis continue moderate doses for 10 days after a clinical cure has been effected.

**Staphylococcal Infection:** (Not for boils). (Surgery should be used in conjunction with chemotherapy). Sulfathiazol 4 gms. followed by 1.5 gms. O.H. IV. till infection has ceased spreading. Then 1 gm. O.H. IV. for 1 week. If bacteriaemia present continue moderate doses for a month.

**Urinary infection:** Sulfathiazol  $\frac{1}{2}$  gm. b.d.

**Prophylaxis:** Traumatic wounds; Compound fractures; Burns — Powdered sulfanilamide 2 gm. locally. Sulfanilamide orally 1 gm. t.i.d. Quiescent rheumatic fever patient — Sulfanilamide  $\frac{1}{2}$  gm. t.i.d. Abdominal operations with threatened peritonitis—Sulfathiazol 1 gm. O.H. IV. for 1 week. Urological procedures — Sulfathiazol  $\frac{1}{2}$  gm. b.d.

**Parenteral Administration:** To be used when oral administration is impossible. Sulfanilamide 1% solution in sterile normal saline subcutaneously. Sodium Sulfapyridine and Sodium Sulfathiazol. 5% solution in sterile distilled water intravenously. Do not boil.

#### Toxic Reactions: Precautions—

1. Patients taking sulfapyridine or sulfathiazol should have enough fluids to produce at least 1,000 ccs. urine per day and thus prevent urinary precipitation with haematuria or calculi.
2. Daily observation re. body aches, jaundiced sclerae, injected conjunctivae, pale conjunctivae, sore throat, rash, drug fever, gross haematuria or anuria. Stop drug and force fluids if any of the above occur.
3. Haemolytic anaemia occurs up to the 5th day. Agranulocytic angina occurs after 2 weeks in 0.2% patients taking sulfanilamide or sulfapyridine. Every patient taking these drugs for over 2 weeks should have a white cell count.

—Adapted from Perrin H. Long,  
Can. Med. Ass'n. Jour., March, 1941, p. 217.

### Federation of Medical Women of Canada

The Annual Meeting of the Federation of Medical Women of Canada will be held Tuesday, June 24th, 1941, at 10 a.m. in the University Women's Club, Winnipeg. Guest speaker to be announced.

Dinner in honor of visiting medical women has been arranged Thursday, June 26th, 1941, at the Manitoba Club.

### Unified Registration

The Council of The College of Physicians and Surgeons of Manitoba wishes to thank the doctors of this Province for the prompt and cordial support in their replies to the information asked for, regarding a resolution proposing a unified single registration for the Dominion of Canada.

W. G. CAMPBELL,  
Registrar.



## "All-Out" for the Victory Loan 1941

There comes a time in the lives of most men when they come face to face with reality and cannot dodge it. Such a time has arrived for every man and woman in Canada who has a sum of money over and above that needed for ordinary expenditures.

There are few Canadians who do not treasure money, either for the protection it affords the individual against unforeseen calamity or for the value it represents in terms of goods which it will buy. Some treasure money because it is the concrete result of years of hard work. Others are reluctant to part with money because to them it is a sheltering arm around the family.

Now, however, Canadians are faced with the realization that no matter how highly they regard their personal cash reserves, *they must loan it in order to keep it.*

The battle against Germany can be viewed in part as a battle in behalf of Canadian cash in hand. Let Germany win, and assets of Canadians will dry up almost to the vanishing point.

Great Britain, Australia, New Zealand, South Africa, India and Canada have been left alone to fight the Nazi monster. The challenge, undoubtedly the most stupendous in world history, demands the active help of every Canadian. *Those with money, be it fifty dollars or two hundred and fifty thousand dollars, must loan their cash to the Government if Canada is to carry on with her present share in the big battle.*

The man or woman who shrugs his or her shoulder and deliberately attempts to duck from under the responsibility of each individual in this time of national crisis will earn the contempt of his fellow citizens.

## OBITUARY

### CAPT. JAMES WENDELL KIPPEN

Capt. James Wendell Kippen, R.C.A.M.C., 25, was reported missing on May 6th following the sinking of a British ship due to enemy action. A son of Dr. and Mrs. Robert D. Kippen, he was born in Newdale, received his early education there, and his medical education in the University of Manitoba at Winnipeg, graduating in 1939. During his final year he was President of the Manitoba Medical Students Association and senior stick. Following graduation he served one year as senior interne in the Winnipeg General Hospital and then enlisted in the Royal Canadian Army Medical Corps. He was proceeding overseas as Medical Officer in an artillery unit when the disaster occurred. Possessed of great vigour and endowed with a vital personality, he was a young man of great promise and already had a wide circle of friends.

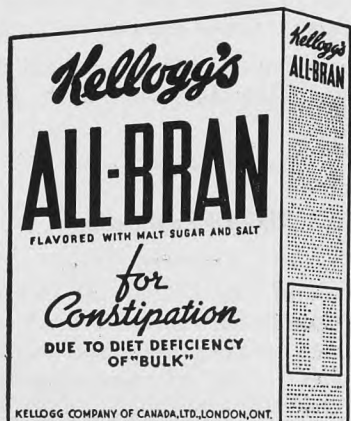


## This May Help in TREATING CONSTIPATION

Physicians recognize constipation is often due to lack of "bulk"-forming foods in the diet . . . and many have wanted just such a food they could use with assurance.

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If you would like to have two reprints of authoritative articles on bran and constipation (from the American Journal of Digestive Diseases and the Journal of the American Medical Association), write Box A, Kellogg Medical Company, write Box A, Kellogg Company of Canada, Ltd., London, Ontario.





## Department of Health and Public Welfare

### Industrial Hygiene

The following information has been prepared by the Division of Industrial Hygiene of the Department of Pensions and National Health, Ottawa, for the information of employers and employees, and as the articles hereinafter quoted contain advice regarding prevention and treatment the Department of Health and Public Welfare believe they will prove of real interest to the practising profession throughout the province. This is particularly so in view of the increased industrial development throughout Manitoba.

#### Nitrous Fume Poisoning

"Nitrous fumes are a violently poisonous mixture of yellow, brown and brownish-red gases. Even though the fumes have an unpleasant irritating odour, breathing of them can be tolerated. The fumes are much heavier than air and, therefore, in a badly ventilated space, may collect at floor level.

"The composition of the fumes will depend upon the processes by which they are developed and in certain processes the nitrous fumes evolved may be of an explosive, as well as a poisonous, nature. The fumes arise when nitric acid is exposed to air and when this acid comes into contact with organic matter such as wood, paper, etc. Nitrous fumes are also evolved when nitric acid comes into contact with metals. Among further sources of nitrous fumes are electric arcs and explosions.

#### In Industry

"The following types of workers are most likely to be exposed to the danger of nitrous fume poisoning:

1. Aniline makers
2. Arc welders
3. Artificial leather workers
4. Blasters—(dynamite—mining—tunnelling)
5. Bleachers
6. Calico printers
7. Chemists and chemical workers
8. Collodion makers
9. Damascening workers
10. Dye makers
11. Electro platers
12. Etchers
13. Explosive workers
14. Galvanizers
15. Hat workers
16. Metal cleaners
17. Metal refiners
18. Mercury fulminate workers
19. Miners
20. Mixed acids handlers
21. Moving picture operators
22. Nitrators
23. Nitric acid workers
24. Nitrobenzene makers
25. Nitrocellulose makers
26. Nitroglycerine makers
27. Nitrous acid workers
28. Photo engravers
29. Picklers (metals)
30. Picric acid makers
31. Pyroxylin plastic workers
32. Sulphuric acid workers (Chambers Process)
33. Synthetic ammonia workers (Haber Process)
34. Tetryl makers
35. Tetra-nitro-aniline makers
36. Torch cutters (metals)
37. Tunnellers
38. Welders

#### Poisoning by Nitrous Fumes

"Poisoning by nitrous fumes occurs as a result of breathing the fumes. When the fumes are allowed to escape, air currents carry them through the atmosphere which is being breathed. These fumes have an irritating effect upon the breathing passages and the lungs and seriously damage the tissues of these organs. In addition the fumes may be absorbed into the blood stream through the lungs, and poison the whole body. It must be remembered that some individuals are more easily poisoned than others and that workers who feel that they have become accustomed to the fumes are not immune from poisoning.

#### Acute Poisoning

"Since breathing of nitrous fumes can frequently be tolerated without discomfort, a worker may not have any warning that he is being poisoned. However, the symptoms of acute poisoning usually do not develop for some hours after the fumes have been inhaled. In from six to twenty-four hours after inhalation of the fumes the lungs may become congested with fluids. Death may result a few hours after the worker realizes, by his symptoms, that something is wrong.

"It must be stressed that an individual who has been affected by an exposure may lose the preliminary symptom of violent, spasmodic cough when removed from the exposure and may seem to be normal for some hours before the serious bronchial and lung conditions begin to appear. **Consequently, workers developing a violent cough on exposure must be removed at once and placed at rest and under observation.**

#### Chronic Poisoning

"Chronic poisoning by nitrous fumes occurs as a result of continued daily breathing of air containing small quantities of the fumes. The fumes absorbed in this way cause injury to the breathing passages and the lungs with the result that the worker may have a chronic cough, headaches, loss of appetite, constipation, corrosion of the teeth and inflammation of the mouth, nostrils and eyes. When a worker notices such signs he should report to a physician at once and should inform the physician of his exposure to nitrous fumes. Cases of nitrous fume poisoning should be reported to the employer and to the Provincial Departments of Health and Labour so that adequate steps may be taken to protect other workers.

"**The effects of nitrous fumes on the body are insidious and it cannot be too strongly stressed that even a slight exposure to these fumes may result in death. The fumes may have a delayed action on the body and a worker can feel perfectly well for some hours after the exposure before the serious effects begin to appear.**

#### Treatment

##### Acute Poisoning

"No matter how slight the exposure to the brownish-red nitrous fumes, precautions should be taken to avoid the effects of poisoning. If the worker suffers from a feeling of oppression in the chest or from a cough after exposure,— (1) The worker should be removed to the open air and kept warm; (2) A physician should be called without delay; (3) If coughing continues and difficulty in breathing occurs, before the arrival of a physician, oxygen should be given; (4) Artificial respiration should be avoided unless breathing has ceased.

##### Chronic Poisoning

"If a worker suffers from a chronic cough, corrosion of the teeth, inflammation of the mouth, nostrils and eyes, headaches, loss of appetite and constipation a physician should be consulted without delay.

## Prevention

### Responsibility of the Employer

"1. To isolate processes evolving nitrous fumes and to insure that such processes are carried out in closed vessels, wherever practicable.

"2. To remove nitrous fumes by exhaust ventilation at the point of origin when the material requires to be used in open vessels.

"3. To provide adequate ventilation, in addition to exhaust hoods, for all workrooms in which nitrous fumes may be encountered.

"4. To insure that ventilation equipment is operating satisfactorily by having workroom air tested for nitrogen dioxide routinely. Ten parts of nitrogen dioxide per million parts of air (by volume) is now considered the maximum safe concentration.

"5. To insure that no worker may enter a tank or enclosed space until thorough ventilation has been carried out. Persons required to enter tanks or enclosed spaces which have contained nitrous fumes should be protected by a safety-belt and by the presence of another worker on the outside.

"6. To provide protective clothing and goggles for workers required to handle nitric acid.

"7. To insure frequent periodic medical examination of all workers exposed to nitrous fumes. Such examination should be carried out by a physician familiar with nitrous fume poisoning. Health records of nitrous fume workers should be kept and **medical advice as to transfer of an affected worker to more innocuous duties must be acted upon promptly.**

"8. To insure that workers who have been exposed to nitrous fumes and who are suffering from a cough receive medical attention immediately. No worker who has become affected by the fumes should be allowed to return to work without a physician's order. It must be remembered that nitrous fumes have a delayed action.

"9. To insure that all those who may have occasion to be exposed to nitrous fumes are made aware of the poisonous nature of the fumes. Workers must be encouraged to report early symptoms of poisoning.

### Responsibility of the Employee

"1. To carry out, in detail, all safety measures which are advised for protection against nitrous fume poisoning.

"2. To make use of ventilation equipment, gas masks and clothing supplied for protection against nitrous fumes and nitric acid and to report to the employer when such equipment is not in good order.

"3. To remember that nitrous fumes are yellow, brown or brownish-red in colour, are **VIOLENTLY POISONOUS**, and that breathing the fumes is dangerous even though they may not be found irritating at the time.

"4. To report immediately, both to the employer and physician, any signs of irritation after exposure to nitrous fumes."

## T.N.T. (Trinitrotoluene) Poisoning

"Trinitrotoluene is a highly poisonous explosive known in industry as T.N.T. It is manufactured by treating liquid toluene with a strong mixture of nitric and sulphuric acids. Pure T.N.T. is a white solid substance, but in industry rarely appears in this pure form. It occurs usually as a yellowish solid which melts at 81° C. (176° F.).

"When T.N.T. is handled in the powdered form, it may become distributed throughout the workroom atmosphere as a fine dust. When the substance is melted and handled in the molten or liquid form, it gives off fumes which gradually become dispersed throughout the workroom atmosphere.

"T.N.T. is inflammable as well as highly explosive. Provided it is not subject to strong shock, it does not readily explode. However, care should be taken in T.N.T. workrooms to avoid sparks due to static electricity. The fumes of molten T.N.T. have a characteristic metallic taste when they are breathed.

### Industrial Uses

"The important use of T.N.T. is as an explosive. Hence, most workers manufacturing and processing T.N.T. will be exposed to its poisonous effects.

### Poisoning by T.N.T.

"Poisoning by T.N.T. occurs in three ways:

"1. If T.N.T. is in contact with the skin, it will be absorbed through the skin into the body, at the same time possibly giving rise to a skin reaction.

"2. If employees handling T.N.T. are not careful to have their hands thoroughly clean before eating, it is possible that T.N.T. may be taken in with the food and absorbed into the body by way of the stomach.

"3. The most important mode of entry of T.N.T. into the body is by way of the respiratory tract. T.N.T. may be absorbed in this fashion, either as a result of breathing the vapour which arises from the molten T.N.T. or as a result of breathing air containing T.N.T. dust. Molten T.N.T. evaporates on exposure to air and dangerous quantities of the fumes may be present in the air unless evaporation is prevented by using closed vessels.

### Skin Reaction

"The skin of some workers will be more readily affected by T.N.T. than that of others. It is not possible to tell beforehand which individual may suffer a skin reaction to this substance. A skin reaction to T.N.T. frequently occurs within the first few weeks of exposure to the material. However, even individuals who have been exposed to T.N.T. for a considerable time are not immune. The wrists, ankles and neck are most frequently affected, since they may be subjected to rubbing with clothing saturated with T.N.T. Redness of the skin, a rash or an eczema may be the signs of the skin reaction.

### T.N.T. Sickness

"T.N.T. sickness is apt to occur among workers who have not previously handled the material. Individuals under the age of 18 years and individuals who have suffered from previous stomach trouble should not engage in work with T.N.T.

"It cannot be too strongly stressed that T.N.T. poisoning can develop to a critical stage without the worker being aware for some time that he is being poisoned. Death may even occur without T.N.T. poisoning being suspected as a primary cause.

"A number of signs of T.N.T. sickness may be evident to the individual affected, among which the following may be noted: sneezing, watering of the eyes, chronic cough, catarrh, dryness of the throat, a feeling of fatigue, pains in the legs and feet, headache, stomach pains, vomiting and especially intolerance to alcohol. Blueness of the lips, lack of colour or pallor, stomach disorders and a brown or pink urine are signs to be watched for with especial care.

"A worker who notices any of the afore-mentioned signs should report to a physician and should inform the physician of the exposure to T.N.T. Cases of T.N.T. poisoning should be reported to the employer and to the Provincial Health and Labour Departments, so that adequate steps may be taken to protect other workers.

**Treatment**

"At the first suspicion of a skin reaction or of sickness, the affected worker should be removed from his exposure to T.N.T. and receive the attention of a physician familiar with T.N.T. poisoning.

**Prevention****Responsibility of the Employer**

"1. To ensure that no employees under eighteen years of age and no employees who have suffered from gastric disorders shall be allowed to work with T.N.T.

"2. To ensure frequent periodic medical examination of all workers exposed to T.N.T., such examination to be carried out by a physician familiar with the prevention of T.N.T. poisoning. Health records of T.N.T. workers should be kept and medical advice as to the transfer of an affected worker from T.N.T. work to more innocuous duties must be acted upon promptly.

"3. To ensure that all those connected with the manipulation of T.N.T. are made aware of its poisonous nature.

"4. To provide masks and uniforms for workers required to use T.N.T., in accordance with the advice of competent health authorities.

"5. To provide frequent changes of uniform; and to provide solutions of acetone or sodium sulphite (5%) and other washing facilities for T.N.T. workers. No person should be allowed to leave work with T.N.T. adhering to the skin.

"6. To isolate T.N.T. processes and confine T.N.T. dust and vapour within closed vessels, wherever possible.

"7. To remove T.N.T. dust and vapour by exhaust ventilation at the point of origin, when the material requires to be used in open vessels.

"8. To provide adequate ventilation in addition to exhaust hoods for all workrooms in which T.N.T. is being handled.

"9. To ensure that ventilating equipment is operating satisfactorily by having workroom air tested routinely for T.N.T.

**Responsibility of the Employee**

"1. To carry out in detail all health and safety measures which are advised in connection with the use of T.N.T.

"2. To make use of ventilating equipment, gas masks and other protective devices supplied for protection against T.N.T. and to report when this equipment is not in good order.

"3. To ensure that T.N.T. is thoroughly removed from the skin before eating and before leaving work.

"4. To report physical complaints early. T.N.T. poisoning is insidious in its onset. When a physician is consulted, he should always be told if T.N.T. is being handled, since such information may assist in diagnosis and cure."

If it is the desire of the readers of this article to obtain copies of the above information in pamphlet form they may do so by making application to either this Department, or to the Department of Pensions and National Health, Ottawa.

**REPORT OF COMMUNICABLE DISEASES**

March 26th to April 22nd

**Measles:** Total 287—Winnipeg 128, Flin Flon 50, Brandon City 21, South Norfolk 20, Tuxedo Town 8, Arthur 5, Kildonan East 4, Transcona Town 4, Winnipeg Beach 4, Albert 3, Kildonan West 3, St. Boniface City 3, Silver Creek 2, St. Vital 2, Brenda 1, Edward 1, Hamiota Rural 1, Hanover 1, Hillsburg 1, Napinka Village 1, Rivers Town 1, Roblin Rural 1, Rockwood 1, Selkirk Town 1, Shoal Lake Village 1, St. James 1, Turtle Mountain 1, Woodlands 1 (Late Reported: Unorganized 7, Roblin Rural 3, Brandon City 2, Assiniboia 1, Charleswood 1, Hillsburg 1, Winnipeg Beach Town 1).

**Mumps:** Total 158—Flin Flon 78, Winnipeg 56, Kildonan East 3, Fort Garry 3, Brandon City 2, Swan River Town 2, Coldwell 1, Cypress South 1, Franklin 1, Macdonald 1, Minitonas 1, Rockwood 1, Swan River Rural 1, St. Boniface City 1, Winchester 1, Unorganized 1 (Late Reported: Minitonas 4).

**Chickenpox:** Total 127—Winnipeg 97, Woodlands 9, Kildonan East 6, Kildonan West 3, St. James 2, Transcona Town 2, Coldwell 1, Dauphin Town 1, Deloraine Town 1, Rapid City 1, Swan River Rural 1, Ste. Anne 1 (Late Reported: Unorganized 2).

**German Measles:** Total 117—Brandon City 63, Kildonan West 13, Unorganized 12, St. James 7, Kildonan East 4, Lawrence 4, Hamiota Village 3, Hamiota Rural 2, St. Boniface City 1, St. Vital 1 (Late Reported: Brandon City 6, Kildonan East 1).

**Scarlet Fever:** Total 45—Winnipeg 13, Rivers Town 10, Portage Rural 4, Ste. Rose Village 3, Ethelbert 2, Brandon City 1, Gladstone Town 1, Tuxedo 1, Unorganized 1 (Late Reported: Portage Rural 6, Flin Flon 3).

**Tuberculosis:** Total 29—Winnipeg 8, Brokenhead 2, Dufferin 2, St. Boniface 2, Unorganized 2, Argyle 1, Cypress North 1, Hanover 1, Lorne 1, Montcalm 1, Portage Rural 1, Russell Rural 1, Selkirk Town 1, Siglunes 1, St. Clements 1, St. James 1, St. Vital 1, Westbourne 1.

**Diphtheria:** Total 10—Winnipeg 6, Unorganized 2, Lakeview 1 (Late Reported: Mossey River 1).

**Erysipelas:** Total 10—Winnipeg 3, Teulon Village 2, St. Boniface 1, Ste. Anne 1, Ritchot 1, Portage City 1, Melita Town 1.

**Meningococcal Meningitis:** Total 6—La Broquerie 1, Lawrence 1, St. Vital 1, Transcona Town 1, Unorganized 1, Winnipeg 1.

**Pneumonia Lobar:** Total 5—Portage City 1, Ste. Rose Rural 1, Woodlands 1 (Late Reported: St. Clements 1, Unorganized 1).

**Influenza:** Total 3—Winnipeg 1 (Late Reported: Unorganized 1, St. Boniface 1).

**Whooping Cough:** Total 3—Carman Town 1, De Salaberry 1, Kildonan West 1.

**Encephalitis:** Total 2—Winnipeg 1, Westbourne 1.

**Typhoid Fever:** Total 2—Winnipeg 1 (Late Reported: Unorganized 1).

**Puerperal Fever:** Total 2—Killarney Town 1 (Late Reported: Lawrence 1).

**Ophthalmia Neonatorum:** Total 1—Winnipeg 1.

**Treaty Indians:** Total 9—1940 Cases—Typhoid Fever 2, 1941 Cases—Tuberculosis 6, Measles 1, Diphtheria 1.

**Venereal Disease:** Total 128—Syphilis 37, Gonorrhoea 91.



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**DEATHS FROM COMMUNICABLE DISEASE**

March, 1941

URBAN—Cancer 46, Pneumonia Lobar 4, Pneumonia (other forms) 9, Syphilis 4, Influenza 3, Tuberculosis 3, Lethargic Encephalitis 1, Measles 1, Scarlet Fever 1, other deaths under one year 22, other deaths over one year 178, Stillbirths 22. Total 294.

RURAL—Cancer 22, Pneumonia Lobar 1, Pneumonia (other forms) 21, Influenza 12, Tuberculosis 8, Chickenpox 1, Lethargic Encephalitis 1, Syphilis 1, other deaths under one year 23, other deaths over one year 139, Stillbirths 9. Total 283.

INDIANS—Tuberculosis 10, Pneumonia Lobar 1, Pneumonia (other forms) 6, Influenza 5, other deaths under one year 6, other deaths over one year 4, Stillbirths 1. Total 33.

Disease	Manitoba March 26-April 22	Ontario March 26-April 22	Saskatchewan March 26-April 22	Minnesota March 26-April 22
Anterior Poliomyelitis .....				1
Meningococcal Meningitis ..	6	61	1	1
Chickenpox .....	125	729	93	536
Diphtheria .....	9	46	2	5
Erysipelas .....	10	5	4	3
Influenza .....	1	84		12
Lethargic Encephalitis .....	2			
Measles .....	271	4,885	609	52
German Measles .....	110	6,959	313	
Mumps .....	154	1,181	93	
Ophthalmia Neonatorum ....	1			
Puerperal Fever .....	1		1	
Scarlet Fever .....	36	777	15	219
Septic Sore Throat .....		13	3	
Smallpox .....			9	8
Tuberculosis .....	29	186	46	159
Typhoid and Paratyphoid Fever .....	1	8	2	
Psittacosis .....		13		
Undulant Fever .....		3		
Whooping Cough .....	3	498	16	394

SMALLPOX—It is to be noted that this disease has been reported in the past two months from both Saskatchewan and Minnesota. Manitoba has so far been free from the disease. Continuous efforts at vaccination are necessary.

PSITTACOSIS—This disease which is comparatively rare in this country has been reported from Ontario. These cases occurred between October, 1940, and February, 1941. Most of them were in the City of Toronto.

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